

allegedly are not suitable for uses other than those involving hybridization to a complementary nucleic acid. Applicants respectfully request reconsideration of this rejection, as there is no reason to believe that the claimed compounds cannot be put to uses that do not involve hybridization. The claimed compounds, for example, can be used as intercalators and nucleic acid cleaving agents. Neither intercalation nor nucleic acid cleavage would require hybridization between a compound of the invention and a nucleic acid. As the Office Action notes, all that would be required is that the compounds of the invention have "some affinity" for nucleic acids. (Office Action at page 2). In the case of nucleic acid cleavage, all that would be required is that the compound of the invention and the nucleic acid come into contact and react with one another. In the case of intercalation, all that would be required is that a portion of a compound of the invention insert itself between base pairs in a double-stranded nucleic acid. The compounds of the invention clearly are capable of this level of interaction with nucleic acids. Accordingly, reconsideration and withdrawal of the rejection under § 112, first paragraph, respectfully is requested.

The Office Action at page 4 asserts that certain of the claimed compounds "have no utility," and that the specification does not identify "which compounds have utility and which do not." Applicants believe that each of the claimed compounds have

a patentable utility, and request that any evidence to the contrary officially be made of record.

Claims 1-4, 6-18 and 20-29 stand rejected under 35 U.S.C. § 102(b) as being anticipated by WO 92/05186 ("the Matteucci reference"). Applicants respectfully request reconsideration of this rejection, as the Matteucci reference fails to disclose any claimed compound. The reference purports to disclose compounds having internucleosidic nitrogen-containing linkages, whereas the claimed compounds have nitrogen-containing substituents that clearly do not link nucleosides. The Office Action at page 5 appears to assert that the disclosure of the Matteucci reference is not limited to nucleosidic linkages, and cites a sentence appearing at page 25 of the reference in support of this assertion. However, as can be seen by reading the paragraphs immediately preceding the cited sentence, the sentence is explicitly directed to the positioning of atoms "in the [internucleoside] linkage." Thus, the cited text fails to disclose or suggest the claimed compounds, in which  $-R_A-N(R_{1a})(R_{1b})$  is not in an internucleoside linkage.

Claims 1-29 stand rejected under 35 U.S.C. § 103 as allegedly being unpatentable over the Matteucci reference. This rejection appears to presume that the claims are anticipated by the Matteucci reference. Since, as discussed above, the Matteucci disclosure does not anticipate the claims, reconsideration and withdrawal of the rejection for alleged

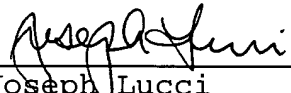
ISIS-1169

PATENT

obviousness, as well as the rejection for alleged anticipation, respectfully are requested.

It is believed all of the claims presently before the Examiner patentably define the invention over the prior art and are otherwise in condition for ready allowance. An early Office Action to that effect is, therefore, earnestly solicited.

Respectfully submitted,

  
\_\_\_\_\_  
Joseph Lucci  
Registration No. 33,307

Date: March 11, 1996

WOODCOCK WASHBURN KURTZ  
MACKIEWICZ & NORRIS  
One Liberty Place - 46th Floor  
Philadelphia, PA 19103  
(215) 568-3100